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SEQUENCE LISTING

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<120> GENETIC ENGINEERING OF LIGNIN BIOSYNTHESIS IN PLANTS

<130> 66040-9651

<140> 09/530,663

<141> 2000-07-11

<150> PCT/US98/24138

<151> 1998-11-12

<150> 08/969,046

<151> 1997-11-12

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Pro	Ser	Ser	Pro	Glu	Phe	Val	Leu	Ala	Phe	Leu	Gly	Ala	Ser	His	Arg
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 Ala Tyr Cys Phe Glu Asn Leu Ser Asp Phe Ser Asp Arg Pro Cys Leu  
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 65 70 75 80  
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 Glu Ala Asn Phe Asp Leu Ser Ser Ile Arg Val Val Leu Ser Gly Ala  
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Ser	Asp	Asp	Leu	Asp	Leu	Ser	Glu	Glu	Ala	Val	Lys	Glu	Tyr	Ile	Ala
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Lys	Gln	Val	Val	Phe	Tyr	Lys	Lys	Leu	His	Lys	Val	Phe	Phe	Val	His
	530					535					540				
Ser	Ile	Pro	Lys	Ser	Ala	Ser	Gly	Lys	Ile	Leu	Arg	Lys	Asp	Leu	Arg
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Ala	Lys	Leu	Ala	Thr	Ala	Thr	Thr	Met	Ser						
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 <212> DNA  
 <213> Populus tremuloides Michx. (aspen)

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aaaactaaaa	ttaaaaaaga ttttagattat taaattatta ggtaattca cgggttggtc 420
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1172

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<211> 1180

<212> DNA

<213> Populus tremuloides Michx. (aspen)

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tattttttta	aaaatttaaa	aatttaaatta	taacattttt	attttatccc	tcattaacta	180
aaatagggat	ggtaatagat	attcatgaag	ggagttatat	atcaaagat	attagttaag	240
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aatattttatc	ggattttcagg	tattcatatg	aatattttatt	tgattattat	ttattcaaca	360
aaaaataaaa	caattaatat	gcatgtttga	agttttata	tattttaagt	taggtttaga	420
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atcgatcgat	tagaaccata	cagaattggg	attgggtggg	tttacattct	gcgttagata	1140
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<211> 12

<212> PRT

<213> Populus tremuloides Michx. (aspen)

<400> 7

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<211> 7

<212> PRT

<213> Populus tremuloides Michx. (aspen)

<400> 8

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<212> DNA

<213> Populus tremuloides Michx. (aspen)

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<213> Populus tremuloides Michx. (aspen) unknown

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<400> 14  
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<210> 15  
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<400> 15  
cctttcacca accccc 16

<210> 16  
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<400> 16  
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